

6400 - AIRPORT ZONING

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6405 – Purpose

The purpose of the airport zoning provision is to ensure protection of the utility of Sheppard Air Force Base/Wichita Falls Municipal Airport and Kickapoo Downtown Airpark and the public investment by the regulation of land uses in the vicinity of Sheppard Air Force Base/Wichita Falls Municipal Airport and Kickapoo Downtown Airpark where it has been determined that Sheppard Air Force Base/Municipal Airport and Kickapoo Downtown Airpark are essential economic elements of the city and surrounding cities and counties.

It is also the purpose of this provision to protect the health, safety, and general welfare of the public where it is recognized that obstructions, aircraft accidents, and excessive noise have the potential for endangering or harming the lives and/or property of users or occupants of land in the vicinity of Sheppard Air Force Base/Wichita Falls Municipal Airport and Kickapoo Downtown Airpark.

6407 – Definitions

Airport means Sheppard Air Force Base/Wichita Falls Municipal Airport and Kickapoo Downtown Airpark.

Airport elevation means the established elevation of the highest point on the usable landing area measured in feet from mean sea level.

Airport hazard means any structure or tree or use of land which obstructs the air space required for the flights of aircraft or which obstructs or interferes with the control or tracking and/or data acquisition in the landing, taking off or flight at an airport, or at any installation or facility relating to flight, and tracking and/or data acquisition of the flight craft; hazardous, interfering with or obstructing such landing, taking off or flight of aircraft or which is hazardous to or interferes with tracking and/or data acquisition pertaining to flight and flight vehicles.

Airport hazard area means any area of land or water upon which an airport hazard might be established if not prevented as provided in this article.

Airport reference point means the point established as the approximate geographic center of the airport landing area and so designated.

Approach surface means a surface longitudinally centered on the extended runway centerline and extending outward and upward from each end of the primary surface. An approach surface is applied to each end of each runway based upon the type of approach available or planned for that runway end. The slope and dimensions of the approach surfaces are set forth in section 6445 of this article.

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Approach/departure surface means a surface longitudinally centered on the extended runway centerline, extending outward and upward from the end of the primary surface and at the same slope as the approach zone height limitation slope set forth in section 6425 of this article. In plan the perimeter of the approach surface coincides with the perimeter of the approach zone.

Conical surface means a surface extending outward and upward from the periphery of the horizontal surface at a slope of 20 to one for a horizontal distance of 4,000 feet.

Departure surface means a surface longitudinally centered on the extended runway centerline and extending outward and upward from each runway end. The slopes of the departure surfaces are 40 horizontal for each one vertical (40:1). The inner widths of the departure zones 1,000 feet and the outer widths are 6,466 feet. Slopes and dimensions of the departures zones are as set forth in section 6445 of this article.

Hazard to air navigation means an obstruction determined to have a substantial adverse effect on the safe and efficient utilization of the navigable airspace.

Height. For the purpose of determining the height limits in all zones set forth in this ordinance and shown on the zoning map, the datum shall be mean sea level (MSL) elevation unless otherwise specified.

Horizontal surface means a horizontal plane 150 feet above the established airport elevation, the perimeter of which in plan coincides with the perimeter of the horizontal plane.

Landing area means the surface area of the airport used for the landing, take-off or taxiing of aircraft.

Non-conforming use means any pre-existing structure, object of natural growth, or use of land which is inconsistent with the provisions of this ordinance or an amendment thereto.

Non-precision instrument runway means a runway having an existing instrument approach procedure utilizing air navigation facilities with only horizontal guidance, or area type navigation equipment, for which a straight-in non-precision instrument approach procedure has been approved or planned.

Obstruction means any structure, growth, or other object, including a mobile object, which exceeds a limiting height set forth in section 6448 of this article.

Person means an individual, firm, partnership, corporation, company, association, joint stock association, or body politic, and includes a trustee, receiver, assignee, administrator, executor, guardian, or other representative.

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Primary surface means a surface longitudinally centered on a runway. When the runway has a specially prepared hard surface, the primary surface extends 200 feet beyond each end of that runway; but when the runway has no specially prepared hard surface, or planned hard surface, the primary surface ends at each end of that runway. The width of the primary surface of a runway will be that width prescribed in Part 77 of the Federal Aviation Regulations (FAR) for the most precise approach existing or planned for either end of that runway. The elevation of any point on the primary surface is the same as the elevation of the nearest point on the runway centerline.

In accordance with FAR Part 77, the width of the primary surface at Kickapoo Downtown Airpark is 500 feet for a non-precision instrument runway having visibility minimums greater than three-fourths statute mile.

Runway means a defined area on an airport prepared for landing and take-off of aircraft along its length.

Structure means an object, including a mobile object, constructed or installed by man, including, but not limited to, buildings, towers, cranes, smokestacks, earth formation, and overhead transmission lines.

Transitional surfaces means those surfaces extend outward at 90 degree angles to the runway centerline and the runway centerline extended at a slope of seven feet horizontally for each foot vertically from the sides of the primary and approach surfaces to where they intersect the horizontal and conical surfaces. Transitional surfaces for those portions of the precision approach surfaces, which projects through and beyond the limits of the conical surface, extend a distance of 5,000 feet measured horizontally from the edge of the approach surface and at 90 degree angles to extended runway centerline.

Tree means any object of natural growth.

Visual runway means a runway intended solely for the operation of aircraft using visual approach procedures.

6410 – Applicability

Airport zoning regulations shall apply to all of the incorporated areas of the City of Wichita Falls and unincorporated areas which are located within an accident potential zone, noise zone or height restriction zone as described herein. The use of all land and any buildings or structures located upon the land, and the height, construction, reconstruction, alteration, expansion or relocation of any building or structure upon the land shall conform to all regulations applicable to this section. No land, building, structure or premise shall be constructed and/or used for any purpose or in any manner other than is permitted in this section.

The airport zoning regulation shall be in accordance with prescribed regulations contained V.T.C.A., Local Government Code, § 241.001 et seq.

6415 – Airport Zoning Board

The planning and zoning commission for the City of Wichita Falls shall be responsible for all duties and powers granted to an airport zoning board as required by V.T.C.A., Local Government Code § 241.001 et seq.

Cross reference— Boards, committees and commissions, § 2-101 et seq.; aviation, ch. 18.

6420. - Permitted Uses

Refer to the Land Use Compatibility Table included herein for permitted, controlled, and prohibited land uses in accordance with the latest AICUZ study for Sheppard Air Force Base.

6425 – Sheppard Air Force Base/Municipal Airport

6428 – Accident Potential Zones

Accident potential zones are established within the area of the Sheppard Air Force Base/Wichita Falls Municipal Airport for the purpose of regulating the development of areas which possess an accident potential hazard so as to promote compatibility between the airport and the surrounding land uses, protect the airport from incompatible encroachment, and promote the health, safety and general welfare of property users.

- A. Zone boundaries. The boundaries of said zones are established as shown on the map included in the latest AICUZ study for Sheppard Air Force Base. Accident Potential Zones are located beyond the Clear Zone at the end of the runways and are:
 - 1. For runway 17/35, accident potential zones I and II shall be 1,000 feet wide and 2,500 feet long.
 - 2. For runways 15R/C/L and 33L/C/R, accident potential zone I (APZ I) shall be 3,000 feet wide and 5,000 feet long; accident potential zone II (APZ II) shall be 3,000 feet wide and 7,000 feet long.
- B. Compatible uses. Compatible uses within each accident potential zone are established as shown in the AICUZ study for Sheppard Air Force Base dated August 1999. Only compatible uses will be allowed.

6431 – Noise Zones

For the purpose of regulating the development of areas which possess a noise hazard to certain land uses, so as to promote compatibility between the airport and the surrounding land uses, protect the airport from incompatible encroachment, and promote and protect the health, safety and general welfare of property users, noise zones are established within the area of the Sheppard Air Force Base/Wichita Falls Municipal Airport.

- A. Zone boundaries. The boundaries of said zones are established as shown on the map included in the latest AICUZ study for Sheppard Air Force Base. Noise zones are located within the 65 db or greater noise contour as shown in the AICUZ study for Sheppard Air Force Base.

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- B. Compatible uses. Compatible uses within the noise zone are established as shown in the latest AICUZ study for Sheppard Air Force Base. Only compatible uses will be allowed.

6435 – Height Restriction Zones

In order to carry out the provisions included herein as it pertains to height restrictions, there are established certain height restriction zones which include all of the land lying beneath the approach-departure surface, inner horizontal surface, conical surface, outer horizontal surface, and transitional surface as they apply to Sheppard Air Force Base/Wichita Falls Municipal Airport. Such zones and height restrictions are shown in the most recent AICUZ study of Sheppard Air Force Base. The various zones are established and defined as follows:

A. Zones related to runways

1. *Primary zone (A zone).* All of the land area lying beneath a primary surface, which is a surface on the ground centered lengthwise of the runway and extending 200 feet beyond each end of that runway. The width of the primary surfaces are:
 - a. For runway 17/35, 1,000 feet.
 - b. For runways 15R/33L, 15C/33C, and 15L/33R, 2,000 feet.No structure is permitted within the primary zone (A zone) as described herein.

Clear zone (B zone). All of the land area lying beneath a clear zone surface, which is a surface on the ground beginning at the runway end and symmetrical with the runway centerline extended. The width and length of the clear zone surfaces are:

- a. For runway 17/35, 1,000 feet wide and 3,000 feet long.
 - b. For runways 15R/33L, 15C/33C, and 15L/33R, 3,000 feet wide and 3,000 feet long.
2. *Approach/departure zone (C and D zones).* All of the land area lying under an approach/departure surface, which is an inclined plane or combination inclined plane and horizontal plane, symmetrical about the runway centerline extended. The inclined plane flares outward and upward from the primary surface or planned expansion, and begins with the centerline elevation of the runway end. The slope ratio and dimensions of the inclined planes, (C zone) and dimensions of the horizontal planes, (D zone) are as follow:
 - a. Runway 17/35, one foot in height for each 40 feet in horizontal distance beginning at the runway ends. The runway end centerline elevations are 1,001 feet mean sea level (MSL) and 1,014 feet MSL for runways 17 and 35, respectively. The surface extends to a point ten thousand 10,200 feet from the respective runway ends with an inner width of 1,000 feet and an outer width of 6,466 feet. The maximum elevations for the approach/departure clearance zones are 1,256 and 1,269 feet MSL for runways 17 and 35, respectively.
 - b. Runway 15R/33L, one foot in height for each 50 feet in horizontal distance beginning at the end of the primary surfaces and at the centerline elevation of the runway end. The runway end centerline elevation is 998 MSL feet for runway

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15R and 1,000 MSL feet for 33L. The surfaces extend until they reach an elevation of 500 feet above established airfield elevation (1,515 MSL). They then continue horizontally at this elevation to a point 50,000 feet from the point of beginning. The outer width is 16,000 feet.

- c. Runway 15C/33C (formerly 15L/33R), one foot in height for each 50 feet in horizontal distance beginning at the end of the primary surfaces and at the centerline elevation of the runway end. The runway end centerline elevation is 1,003 MSL feet for runway 15C and 989 MSL feet for runway 33R. The surfaces extend until they reach an elevation of 500 feet above established airport elevation (1,515 MSL). They then continue horizontally at this elevation to a point 50,000 feet from the point of beginning. The outer width is 16,000 feet.
- d. Runway 15L/33R, one foot in height for each 50 feet in horizontal distance beginning at the end of the primary surface centerline elevation of the runway end. The runway end centerline is 1,021 MSL feet for runway 15L and 996.9 MSL for runway 33R. The surfaces extend until they reach an elevation of 500 feet above established airport elevation (1,515 MSL). They then continue horizontally at this elevation to a point 50,000 feet from the point of beginning. The outer width is 16,000 feet.

B. Zones related to airport reference points

- 1. Inner horizontal zone (E zone). All of the land lying beneath the inner horizontal surface, which is an oval-shaped plane at a height of 150 feet above the established airfield elevation (1,165 MSL). It is constructed by scribing an arc with a radius of 7,500 feet about the centerline at each end of each runway and interconnecting these arcs with tangents.
- 2. Conical zone (F zone). All of the land area lying beneath the conical surface, which is an inclined plane that extends from the periphery of the inner horizontal surface outward and upward at a slope of 20 to one for a horizontal distance of 7,000 feet to a height of 500 feet above the established airfield elevation (1,515 MSL).
- 3. Outer horizontal zone (G zone). All of the land area lying beneath the outer horizontal surface, which is an oval-shaped plane located 500 feet above the established airport elevation (1,515 MSL), extending outward from the outer periphery of the conical surface for a horizontal distance of 30,000 feet.
- 4. Transitional zone (H zone). All of the land area lying beneath a transitional surface, which are inclined planes that connect the primary surface and the approach-departure clearance surfaces to the inner horizontal surface, conical surface, outer horizontal, or other transitional surfaces. The slope is one foot in height for each seven feet in horizontal distance outward and upward at right angles to the runway centerline and runway centerline extended. To determine the elevation for the beginning of the transitional surface slope at any point along the lateral boundary of the primary surface, draw a line from the point, perpendicular to the runway centerline or to the runway

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centerline extended. The elevation of the runway or the runway centerline extended at that intersection is the elevation for the beginning of the seven to one slope.

5. Except as otherwise provided in this provision, no structure or obstruction shall be erected, altered or maintained in any zone created by this provision to a height in excess of the applicable height of the surface used to describe such zone.

6445 – Kickapoo Downtown Airpark

6448 – Height Restriction Zones

In order to carry out provisions herein, there are established certain zones which include all of the land lying beneath the approach surfaces, departure surfaces, transition surfaces, horizontal surface and conical surface as they apply to Kickapoo Downtown Airpark. Such zones are shown on the zoning map for Kickapoo Downtown Airpark. An area located in more than one of the following zones is considered to be only in the zone with the more restrictive height limitation.

Primary zone

Primary zone. All of the land area lying beneath the primary surface, which is a surface on the ground centered lengthwise of the runway and extending 200 feet beyond each end of that runway or planned expansion. The width of the primary surface for runway 17/35 shall be 500 feet for a non-precision instrument runway having a non-precision instrument approach with visibility minimums less than three-fourths of a statute mile.

Approach zones

Runway 17: One foot in height for each 20 feet in horizontal distance beginning at the end of the primary zone and extending a horizontal distance of 5,000 feet from that point. The width of the approach zone shall be 500 feet at the end of the primary surface increasing to a width of 1,500 feet at a distance of 5,000 feet from the end of the primary surface. The elevation of the end of runway 17 is 979.0 feet.

Runway 35: One foot in height for each 34 feet in horizontal distance beginning at the end of the primary zone and extending a horizontal distance of 10,000 feet from that point. The width of the approach zone shall be 500 feet at the end of the primary surface increasing to a width of 3,500 feet at a distance of 10,000 feet from the end of the primary surface. The elevation of the end of runway 35 is 1002.9 feet.

Transition zone: Transition zones are hereby established beneath the transition surface adjacent to each runway and approach surface as indicated on the zoning map. Transition surfaces, symmetrically located on either side of runway, have variable widths as shown on the zoning map. Transition surfaces extend outward and upward at right angles to the runway centerline and the runway centerline extended at a slope of seven to one from the sides of the primary surface and from the sides of approach surfaces.

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Horizontal zone: The area beneath a horizontal plane 150 feet above the established airport elevation, the perimeter of which is constructed by swinging arcs of 10,000 feet radii from the center of each end of the primary surface of the runway 17/35 and connecting the adjacent arcs by lines tangent to those arcs.

Conical zone. The area beneath the conical surface extending outward and upward from the periphery of the horizontal surface at a slope of 20 to one for a horizontal distance of 4,000 feet. Departure zones: The departure zones are established at each runway end. The departure zone begins at the runway end and extends for a horizontal distance of 10,200 beyond the runway end. The inner surface of the departure zone is one thousand feet in width increasing to a width of 6,466 at a distance of 10,200. The elevation of the inner edge of the departure zone is the same as the elevation of the runway end.

6450 – Height Limitations

Except as otherwise provided in this article, no structure shall be erected, altered, or maintained, and no tree shall be allowed to grow in any zone created by this ordinance to a height in excess of the applicable height limit herein established for such zone. Such applicable height limitations are hereby established for each of the zones in question as follows:

A. Primary zone. The elevation of the primary zone at any point is the same as the elevation of the nearest point on the runway. No construction is permitted in the primary zone other than that required for aircraft operations and/or safety of aircraft operations. All objects greater than three inches in height above the primary surface shall be constructed on frangible mounted structures.

B. Approach zones.

Runway 17: One foot in height for each 20 feet in horizontal distance beginning at the end of the primary zone at an elevation of 979.0 feet and extending to a point 5,000 feet from the end of the primary zone for a maximum elevation of 1,229.0 feet.

Runway 35: One foot in height for each 34 feet in horizontal distance beginning at the end of the primary zone at an elevation of 1,002.9 feet and extending to a point 10,000 feet from the runway end for a maximum elevation of 1,297.0 feet.

B.[C.] Transition zones. Slope seven feet outward for each foot upward beginning at the sides of and at the same elevation as the primary surface and the approach/departure surface, and extending to a height of 150 feet above the established airport elevation of 998 feet MSL.

C.[D.] Horizontal zone. Established at 150 feet above the airport elevation, or a height of 1,148 feet MSL.

D.[E.] Conical zone. Slopes 20 feet outward for each foot upward beginning at the periphery of the horizontal zone and at 150 feet above the airport elevation and extending to a height of 350 feet above the airport elevation.

E.[F.] Departure zones. One foot in height for each 40 feet in horizontal distance beginning at the end of the runway and at the runway end elevation. The departure zones extend beyond the

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runway ends by a distance 10,200 feet from each runway end for a maximum elevation of 1,234.0 feet for runway 17 and 1,257.9 feet for runway 35.

6455 – Additional Use Restrictions

- A. Notwithstanding any other provisions, no use shall be made of land within any zone established herein in such a manner as to create electrical interference with navigational signals or radio communication between the airport and aircraft, make it difficult for pilots to distinguish between airport lights and others, result in glare in the eyes of pilots using the airport, impair visibility in the vicinity of the airport, create bird strike hazards, or otherwise endanger or interfere with the safe landing, taking off or maneuvering of aircraft intending to use the airport.
- B. No structure, tower, or tree shall be placed, erected or allowed to grow to a height that would penetrate a 100 to one slope from any point on a runway to the outer limits of the extraterritorial jurisdiction without a determination as to the impact of such use. The city and Sheppard Air Force Base shall be responsible for evaluating the impacts of the tower, structure or other obstruction and findings reported to the airport zoning board for evaluation and determination of the impacts. The airport zoning board shall be responsible for approving, conditionally approving or denying the placement of a tower, structure or other obstruction. An exception to requiring approval from the airport zoning board exists where both the city and Sheppard Air Force Base have determined that no significant impact will result.
- C. Regulations herein shall apply within the corporate limits and extraterritorial jurisdiction of the City of Wichita Falls.

6460 – Nonconforming Uses

- A. Regulations not retroactive. The regulations prescribed by this provision shall not be construed to require changes in land use or the removal, lowering or other change or alteration of any structure established prior to the regulation as of October 31, 1982 or otherwise interfere with the continuance of any nonconforming use.
- B. Marking and lighting. Notwithstanding provisions herein, the owner of any nonconforming structure is hereby required to permit the installation, operation and maintenance thereon of such markers and lighting as shall be deemed necessary by Sheppard Air Force Base and/or Wichita Falls Municipal Airport or the City of Wichita Falls to indicate to the operators of aircraft in the vicinity of the airport, the presence of such airport hazards. Such markers and lights shall be installed, operated and maintained at the expense of the City of Wichita Falls and/or Sheppard Air Force Base.

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- C. Reconstruction. Any nonconforming use which is damaged or destroyed by fire, flood, explosion, wind, earthquake, war, riot, or other calamity may be reconstructed and used as it was before such happening.

6465 – Permits

- A. New construction. A permit shall be required to construct a structure in any accident potential zone, noise zone, or height restriction zone established by this provision as specifically provided herein. Each application for a permit shall indicate the location, height, and if applicable, use of the structure, with sufficient particularity to enable it to be determined whether the resulting structure would conform to the regulations herein prescribed. If such determination is in the affirmative, the permit shall be granted. No permit for a structure inconsistent with these provisions shall be granted unless a variance has been approved in accordance with subsection C of this section.

1. In the limits of the accident potential zones (APZ I & II), a permit shall be required for any structure. Such permits shall be issued when the proposed use of the structure is permitted, and the vertical height of the structure above the ground does not exceed the height limits prescribed herein.

(a) In the area lying inside the accident potential zones (APZ I & II), a permit shall be required for any use or structure. Such permits shall be issued when the vertical height of the structure, above the ground, does not exceed the height limits prescribed herein and is found to be a compatible use as defined herein.

(b) In the area lying outside the accident potential zones (APZ I & II) and within a height restriction zone, a permit shall be required for any use or structure. Such permits shall be issued when the vertical height of the structure, above the ground, does not exceed the height limits prescribed herein and is found to be a compatible use as defined herein.

2. In the area within the 65 db or greater noise contour as shown in the latest AICUZ study for Sheppard Air Force Base, a permit shall be required for any use or structure as identified in the land use compatibility table included herein as requiring noise attenuation. Such permits shall be issued when the building official has approved noise attenuation measures on those uses requiring attenuation as identified herein.

No certificate of occupancy (CO) shall be issued for commercial properties until such time compliance is realized through inspection and approval by the building official for compliance with noise attenuation measures as required herein. For residential land uses required to attenuate, no water sales by the city or appropriate water districts or supply corporations shall be permitted until compliance is realized through inspection and approval of the building official.

Noise attenuation measures as required herein, and as approved by the building official, shall be installed and maintained at the same level of attenuation as required by this provision.

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- B. Existing uses.
1. No permit shall be granted that would allow the establishment or creation of any airport hazard or permit a nonconforming use or structure to be made higher or become a greater hazard to air navigation, than it was on the effective date of this ordinance.
 2. No permit shall be granted that would allow the expansion of a use not herein permitted within the noise zone unless said use adheres to attenuation measures as required.
- C. Variances. Any person desiring to erect or increase the height of any structure, or use his property contrary to the regulations prescribed in this provision may apply to the board of adjustment for a variance from such regulations in question. The application for variance from a height restriction shall be accompanied by a determination from the Federal Aviation Administration as to the effect of the proposal on the operation of air navigation facilities and the safe, efficient use of navigable airspace. A variance request shall be processed in accordance with section 7300 of this ordinance.
- D. Obstruction marking and lighting. Any permit or variance granted may, if such action is deemed advisable by the director of community development or his designee or the board of adjustment to effectuate the purposes of this provision and is reasonable under the circumstances, be so conditioned as to require the owner of the structure in question to install, operate and maintain, at their expense, such markings and lights as may be necessary.

6475 – Enforcement

It shall be the duty of the director of community development or his designee to administer and enforce the regulations prescribed herein. Applications for permits shall be made to the director of community development or his designee. Applications required by this provision to be submitted to the director of community development or his designee shall be promptly considered and granted or denied by him. In the event that the director of community development or his designee refuses to grant the application, the applicant may appeal such decision to the board of adjustment.

Applications for variances shall be made to the board of adjustment by first filing said application for variance with the director of community development or his designee who shall forthwith transmit said application to the board of adjustment for determination.

6480 – Airport Board Of Adjustment

An airport board of adjustment shall be appointed comprised of both residents of the City of Wichita Falls, and residents, located outside the city but within the area affected by this ordinance, in accordance with the provisions of the Local Government Code. The board shall

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consist of five members appointed by the city council. Three members shall be citizens of the City of Wichita Falls, and two members shall be residents located outside the city, but within the area affected by this ordinance, who shall serve two-year staggered terms commencing on December 31. The city's resident members shall be appointed in even-numbered years, and the members located outside the city shall be appointed on odd-numbered years. The actions and procedures of the airport board of adjustment shall be those as required under V.T.C.A., Local Government Code § 241.032, as amended.

Cross reference— Boards, committees and commissions, § 2-101 et seq.; aviation, ch. 18.

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6485 – Land Use Compatibility Table For Sheppard Air Force Base/Municipal Airport

		Accident Potential Zones			Noise Zones (db)			
SLUCM No.	Land Use	Clear Zone	APZ I	APZ II	65—70	70—75	75—80	80
10	RESIDENTIAL							
11	HOUSEHOLD UNITS							
11.11	Single Units; Detached	N	N	Y ₁	A ₁₁	B ₁₁	N	N
11.12	Single Units; Semidetached	N	N	N	A ₁₁	B ₁₁	N	N
11.13	Single Units; Attached row	N	N	N	A ₁₁	B ₁₁	N	N
11.21	Two Units; Side by side	N	N	N	A ₁₁	B ₁₁	N	N
11.22	Two Units; One above the other	N	N	N	A ₁₁	B ₁₁	N	N
11.31	Apartments; Walk up	N	N	N	A ₁₁	B ₁₁	N	N
11.32	Apartments; Elevator	N	N	N	A ₁₁	B ₁₁	N	N
12	Group Quarters	N	N	N	A ₁₁	B ₁₁	N	N
13	Residential Hotels	N	N	N	A ₁₁	B ₁₁	N	N
14	Mobile Home Parks or Courts	N	N	N	N	N	N	N
15	Transient Lodgings	N	N	N	A ₁₁	B ₁₁	C ₁₁	N
16	Other Residential	N	N	N ₁	A ₁₁	B ₁₁	N	N
20	MANUFACTURING							
21	Food and Kindred Products; Manufacturing	N	N ₂	Y	Y	Y ₁₂	Y ₁₃	Y ₁₄
22	Textile Mill Products; Manufacturing	N	N ₂	Y	Y	Y ₁₂	Y ₁₃	Y ₁₄

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23	Apparel and other finished products made from fabrics, leather, and similar materials; Manufacturing	N	N	N ₂	Y	Y ₁₂	Y ₁₃	Y ₁₄
24	Lumber and Wood Products (except furniture); Manufacturing	N	Y ₂	Y	Y	Y ₁₂	Y ₁₃	Y ₁₄
A	Furniture and Fixtures; Manufacturing	N	Y ₂	Y	Y	Y ₁₂	Y ₁₃	Y ₁₄
26	Paper and Allied Products; Manufacturing	N	Y ₂	Y	Y	Y ₁₂	Y ₁₃	Y ₁₄
27	Printing, Publishing and allied industries	N	Y ₂	Y	Y	Y ₁₂	Y ₁₃	Y ₁₄
28	Chemicals and Allied Products Manufacturing	N	N	N ₂	Y	Y ₁₂	Y ₁₃	Y ₁₄
29	Petroleum Refining and related industries	N	N	Y	Y	Y ₁₂	Y ₁₃	Y ₁₄
B	Manufacturing							
31	Rubber and Misc. Plastic Products, Manufacturing	N	N ₂	N ₂	Y	Y ₁₂	Y ₁₃	Y ₁₄
32	Stone, Clay and Glass Products Manufacturing	N	N ₂	Y	Y	Y ₁₂	Y ₁₃	Y ₁₄
33	Primary Metal Industries				Y	Y ₁₂	Y ₁₃	Y ₁₄
34	Fabricated Metal Products; Manufacturing	N	N ₂	Y	Y	Y ₁₂	Y ₁₃	Y ₁₄
C	Professional, scientific, and controlling instruments; photographic and optical goods; watches and clocks manufacturing	N	N	N ₂	Y	A	B	N
39	Miscellaneous Manufacturing	N	Y ₂	Y ₂	Y	Y ₁₂	Y ₁₃	Y ₁₄
40	TRANSPORTATION, COMMUNICATIONS AND UTILITIES							
41	Railroad, rapid rail transit and street railroad transportation	N ₃	Y ₄	Y	Y	Y ₁₂	Y ₁₃	Y ₁₄
42	Motor Vehicle Transportation	N ₃	Y	Y	Y	Y ₁₃	Y ₁₄	Y ₁₅

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43	Aircraft Transportation	N ₃	Y ₄	Y	Y	Y ₁₄	Y ₁₅	Y ₁₆
44	Marine Craft Transportation	N ₃	Y ₄	Y	Y	Y ₁₅	Y ₁₆	Y ₁₇
45	Highway & Street Right of Way	N ₃	Y	Y	Y	Y ₁₆	Y ₁₇	Y ₁₈
46	Automobile Parking	N ₃	Y ₄	Y	Y	Y ₁₇	Y ₁₈	Y ₁₉
47	Communications	N ₃	Y ₄	Y	Y	Y ₁₈	Y ₁₉	Y ₂₀
48	Utilities	N ₃	Y ₄	Y	Y	Y ₁₉	Y ₂₀	Y ₂₁
49	Other Transportation, Communications and Utilities	N ₃	Y ₄	Y	Y	Y ₂₀	Y ₂₁	Y ₂₂
50	TRADES							
51	Wholesale Trade	N	Y ₂	Y	Y	Y ₁₂	Y ₁₃	Y ₁₄
52	Retail Trade - building materials hardware and farm equipment	N	Y ₂	Y	Y	Y ₁₂	Y ₁₃	Y ₁₄
53	Retail Trade - general merchandise	N	N ₂	Y ₂	Y	A	B	N
54	Retail Trade - food	N	N ₂	Y ₂	Y	A	B	N
55	Retail Trade - automotive, marine craft, aircraft and accessories	N	Y ₂	Y ₂	Y	A	B	N
56	Retail Trade - apparel and accessories	N	N ₂	Y ₂	Y	A	B	N
57	Retail Trade - Furniture, Home Furnishings and Equipment	N	N ₂	Y ₂	Y	A	B	N
58	Retail Trade - Eating and Drinking Establishments	N	N	N ₂	Y	A	B	N
59	Other retail trade	N	N ₂	Y ₂	Y	A	B	N
60	SERVICES							

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61	Finance, Insurance and real estate services	N	N	Y ₆	Y	A	B	N
62	Personal Services	N	N	Y ₆	Y	A	B	N
62.4	Cemeteries	N	Y ₇	Y ₇	Y	A	Y ₁₃	Y ₁₄ , 21
63	Business Services	N	Y ₈	Y ₈	Y	A	B	N
64	Repair Services	N	Y ₂	Y	Y	Y ₁₂	Y ₁₃	Y ₁₄
65	Professional Services	N	N	Y ₆	Y	A	B	N
65.13	Hospitals, Nursing Homes	N	N	N	A*	B*	N	N
65.19	Other medical facilities	N	N	N	Y	A	B	N
66	Contract Construction Services	N	Y ₆	Y	Y	A	B	N
67	Governmental Services	N	N	Y ₆	Y*	A*	B*	N
68	Educational Services	N	N	N	A*	B*	N	N
69	Miscellaneous Services	N	N ₂	Y ₂	Y	A	B	N
70	CULTURAL, ENTERTAINMENT AND RECREATIONAL							
71	Cultural Activities (including churches)	N	N	N ₂	A*	B*	N	N
71.2	Nature Exhibits	N	Y ₂	Y	Y*	N	N	N
72	Public Assembly	N	N	N	Y	N	N	N
72.1	Auditoriums, Concert Halls	N	N	N	A	B	N	N
72.11	Outdoor Music Shells, Amphitheaters	N	N	N	N	N	N	N
72.2	Outdoor Sports Arenas, spectator sports	N	N	N	Y ₁₇	Y ₁₇	N	N
73	Amusements	N	N	Y ₈	Y	Y	N	N

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74	Recreational Activities (including golf, riding stables, and water recreation)	N	Y _{8, 9, 10}	Y	Y*	A*	B*	N
75	Resorts and Group Camps	N	N	N	Y*	Y*	N	N
76	Parks	N	Y ₈	Y ₈	Y*	Y*	N	N
79	Other Cultural, Entertainment and Recreation	N	Y ₉	Y ₉	Y*	Y*	N	N
80	RESOURCES PRODUCTION AND EXTRACTION							
81	Agricultural (except livestock)	Y	Y	Y	Y ₁₈	Y ₁₉	Y ₂₀	Y _{20, 21}
81.5	Livestock Farming and Animal							
81.7	Breeding	N	Y	Y	Y ₁₈	Y ₁₉	Y ₂₀	Y _{20, 21}
82	Agricultural related activities	N	Y ₅	Y	Y ₁₈	Y ₁₉	N	N
83	Forestry activities and related services	N ₅	Y	Y	Y ₁₈	Y ₁₉	Y ₂₀	Y _{20, 21}
84	Fishing activities and related services	N ₅	Y ₅	Y	Y	Y	Y	Y
85	Mining activities and related services	N	Y ₅	Y	Y	Y	Y	Y
89	Other resource production and extraction	N	Y ₅	Y	Y	Y	Y	Y

LEGEND

SLUCM: Standard Land Use Coding Manual.

Y (Yes): Land use and related structures are compatible without restriction.

N (No): Land use and related structures are not compatible and shall be prohibited.

Yx (yes with restrictions): Land use and related structures generally compatible; see notes 1 through 21.

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Nx (no with exceptions): See notes 1 through 21.

NLR (Noise Level Reduction): NLR (outdoor to indoor) to be achieved through incorporation of noise attenuation measures into the design and construction of the structures.

A, B, or C: Land use and related structures generally compatible; measures to achieve NLR for A (DNL 66-70), B (DNL 71-75), C (DNL 76-80), need to be incorporated into the design and construction of structures and approved by the building official.

Ax, Bx, and Cx: Land use generally compatible with NLR. However, measures to achieve an overall noise level reduction do not necessarily solve noise difficulties and additional evaluation is warranted. See appropriate footnotes.

* The designation of these uses as "compatible" in this zone reflects individual federal agencies' and program considerations of general cost and feasibility factors, as well as past community experiences and program objectives. The airport zoning board shall review request and be responsible for issuing necessary permits based on its findings.

NOTES

1. Maximum density of two dwelling units per acre or lot coverage less than 20 percent, whichever is greater.
2. Within each land use category, uses exist where further definition may be needed due to the variation of densities in people and structures. (See Exhibit A included herein)
3. No buildings, structures or above-ground utilities shall be placed within the area defined as the clear zone.
4. No passenger terminals and no major above-ground transmission lines in APZ 1.
5. Factors to be considered: Labor intensity, structural coverage, explosive characteristics, and air pollution. The proposed use shall be evaluated by the director of community development or his designee in conference with the base AICUZ officer for Sheppard Air Force Base or designated personnel.
6. Low-intensity office uses only. Meeting places, auditoriums, etc. shall not be permitted. For the purpose of this provision, low-intensity is defined as an employment population not to exceed 25 people per acre per shift.
7. Excludes chapels.
8. Facilities must be low intensity. For the purpose of this provision, low-intensity is defined as an employment population not to exceed 25 people per acre per shift.
9. Clubhouse not permitted.
10. Areas for gatherings of people are not recommended. The airport zoning board shall be responsible for issuing the necessary permit based on its findings.
11. a. Residential use is discouraged in DNL 66-75dB and prohibited in DNL above 75db.
b. Where residential uses are allowed, measures to achieve outdoor to indoor noise level reduction (NLR) to DNL 65dB shall be incorporated and considered in individual approvals. The building official shall be responsible for determining adequacy of attenuation measures.

NLR criteria will not eliminate outdoor noise problems. However, building location and site planning and design, and use of berms and barriers may help mitigate outdoor exposure, particularly from near ground level sources. Measures that reduce outdoor noise shall be used whenever practical in preference to measures which only protect interior spaces. Such measures shall be indicated on a site plan and evaluated prior to approval of the required permit.

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12. Measures to achieve the same NLR as required for facilities in DNL 66-70 dB range shall be incorporated into the design and construction of portions of these buildings where the public is received, office areas, noise sensitive areas or where the normal noise level is low.
13. Measures to achieve the same NLR as required for facilities in DNL 71-75 dB range shall be incorporated into the design and construction of portions of these buildings where the public is received, office areas, noise sensitive areas or where the normal noise level is low.
14. Measures to achieve the same NLR as required for facilities in DNL 76-80 dB range shall be incorporated into the design and construction of portions of these buildings where the public is received, office areas, noise sensitive areas or where the normal noise level is low.
15. If noise sensitive, use appropriate NLR. If not noise sensitive the use is compatible.
16. No buildings.
17. Land use is compatible provided special sound reinforcement systems are installed as approved by the building official.
18. Residential buildings require the same NLR as required for facilities in DNL 66-70 dB range.
19. Residential buildings require the same NLR as required for facilities in DNL 71-75 dB range.
20. Residential buildings are not permitted.
21. Land use is not allowed.

For those situations requiring a hearing before the airport zoning board before a permit may be issued, the director of community development or his designee may require building elevations, building plans, landscape plans and other details to allow for proper evaluation of the proposed use in order to ensure the protection of the public's health, safety and welfare.

EXHIBIT A

Uses are compatible if they do not result in a gathering of individuals in an area that would result in an average density of greater than 25 persons per acre per hour during a twenty-four-hour period, not to exceed 50 persons per acre at any time.

The following is a reproduction of Appendix F, Volume H of the 1992 AICUZ study for Sheppard Air Force Base, and is included here for ease of reference.

Average Density

Average densities of persons per hour during a twenty-four-hour period are determined by calculating the number of persons per acre expected on a site, multiplying by the number of hour they will be on the site, and dividing the total by 24.

- Example #1. One 8-hour shift of 30 workers on a one acre site.
Avg. density = 30 persons expected × 8 hours on site = 240
Then 240/24=10: Thus avg. density = 10 persons per hour per 24-hour period.
- Example #2. Two 8-hour shifts of 30 workers on a one acre site.
Avg. density = 30 persons expected × 16 hours on site = 480
Then 480/24=20: Thus avg. density = 20 persons per acre per hour per a 24-hour period.

Maximum Density

The maximum number of persons allowed per acre per hour is calculated by dividing the number of hours persons will be on site by 24 hours, and then dividing by 25 persons per acre per hour by the result. The resulting number is the maximum number of persons allowed per acre per hour, provided it does not exceed 50. Fifty persons per acre at any one time is the maximum number of persons allowed under the standard.

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- Example. Maximum density for two eight-hour shifts on a one acre site.
25 divided by 16/24 = 37.5 persons per hour allowed.

Application of this formula results in the following table which specifies the maximum persons per acre per hour for the duration of the time that persons are expected to be on site during a 24-hour period.

PERSONS PER ACRE

Hours of Operation Per Day	Maximum Persons Allowed Per Acre/ During Each Hour
24	25
23	26
22	27
21	28
20	30
19	31
18	33
17	35
16	37
15	40
14	42
13	46
12 or less	50*

* NOTE: Fractions in the maximum persons allowed column are rounded to the lowest whole number.

* Also note that concentrations of people may not exceed 50 people/acre at any time.